3.16 SOCIOECONOMICS

- 2 This section addresses the potential socioeconomic impacts associated with the voluntary
- 3 conversion of agricultural land to conservation areas, focusing on (1) employment in the
- 4 agricultural sector, (2) the market value of farm production, and (3) property tax and sales tax
- 5 revenues. The potential loss of property taxes from the use of undeveloped or public land also
- 6 is discussed. Other segments of the economy would not be substantively affected by the
- 7 proposed action.

1

8 **3.16.1** Affected Environment

- 9 The affected area is composed of the counties located within the lower basin of the Colorado
- 10 River that are contained within the planning area and off-site locations, although the areas
- 11 where conservation could occur comprise only a small portion of each of the counties. The
- 12 affected counties include Imperial, Riverside, and San Bernardino counties in California; La Paz,
- 13 Mohave, and Yuma counties in Arizona; and Clark County, Nevada. This section presents
- 14 pertinent information describing selected characteristics of the above-mentioned counties,
- focusing on socioeconomic impacts associated with the agricultural sector of the economy since
- the most likely economic effect of implementing the proposed action is the conversion of
- 17 agricultural lands from commercial activity to conservation areas for wildlife use. Virtually all
- agricultural activity in the LCR region is irrigation agriculture using water that is, for the most
- 19 part diverted from the Colorado River directly or indirectly (through groundwater pumping).
- 20 For each of the seven counties that are partially contained within the LCR region, the most
- 21 recent data regarding farms and cropland is contained in the 1997 Census of Agriculture and
- 22 2000 Census of Population and Housing.
- 23 Selected summary information concerning the number, value, and size of farm units in each of
- 24 the seven counties and for the states of Arizona, California, and Nevada is presented in Table
- 25 3.16-1. The average farm size ranges from 167 acres in Riverside County, California to 2,875
- 26 acres in La Paz County, Arizona. The amount of land in farms ranges from almost 71,000 acres
- 27 in Clark County, Nevada to over 997,000 acres in Mohave County, Arizona. The proportion of
- 28 farmland harvested for crops (excluding grazing land) varies greatly, from a low of just over 1
- 29 percent in Mohave County, Arizona to a high of 88 percent in Imperial County, California and
- 30 82 percent in Yuma, Arizona. Of the harvested cropland (which excludes grazing land), a
- 31 uniformly high proportion (between 63 percent and 95 percent) is irrigated.
- 32 An indication of the value of farmland is given by the per acre market value of land and
- 33 buildings. This value ranges from over \$4,600 in Riverside County, California and almost
- \$4,500 in Yuma County, Arizona to almost \$700 in San Bernardino County, California and about
- 35 \$250 in Mojave County, Arizona. The average market value of agricultural products sold per
- 36 farm is highest in Imperial County, California (\$1.526 million) and Yuma County, Arizona
- 37 (\$1.122 million) (Table 3.16-1).

1

Table 3.16-1. Agricultural Data by County (1997)

	California			Nevada		
Imperial	Riverside	San Bernardino	La Paz	Mohave	Yuma	Clark
557	3,048	1,455	97	212	465	209
489,726	509,031	924,015	278,854	997,171	237,742	70,741
433,119	245,446	39,543	100,835	12,060	195,416	3,406
\$3,068	\$4,618	\$693	\$1,512	\$257	\$4,496	\$1,610
\$850,315	\$1,047,525	\$617,833	\$94,665	\$14,983	\$522,063	\$18,926
\$1,526,662	\$343,676	\$424,628	\$975,925	\$70,674	\$1,122,717	\$90,557
	557 489,726 433,119 \$3,068 \$850,315 \$1,526,662	557 3,048 489,726 509,031 433,119 245,446 \$3,068 \$4,618 \$850,315 \$1,047,525 \$1,526,662 \$343,676	Imperial Riverside Bernardino 557 3,048 1,455 489,726 509,031 924,015 433,119 245,446 39,543 \$3,068 \$4,618 \$693 \$850,315 \$1,047,525 \$617,833 \$1,526,662 \$343,676 \$424,628	Imperial Riverside Bernardino La Paz 557 3,048 1,455 97 489,726 509,031 924,015 278,854 433,119 245,446 39,543 100,835 \$3,068 \$4,618 \$693 \$1,512 \$850,315 \$1,047,525 \$617,833 \$94,665 \$1,526,662 \$343,676 \$424,628 \$975,925	Imperial Riverside Bernardino La Paz Mohave 557 3,048 1,455 97 212 489,726 509,031 924,015 278,854 997,171 433,119 245,446 39,543 100,835 12,060 \$3,068 \$4,618 \$693 \$1,512 \$257 \$850,315 \$1,047,525 \$617,833 \$94,665 \$14,983	Imperial Riverside Bernardino La Paz Monave Yuma 557 3,048 1,455 97 212 465 489,726 509,031 924,015 278,854 997,171 237,742 433,119 245,446 39,543 100,835 12,060 195,416 \$3,068 \$4,618 \$693 \$1,512 \$257 \$4,496 \$850,315 \$1,047,525 \$617,833 \$94,665 \$14,983 \$522,063 \$1,526,662 \$343,676 \$424,628 \$975,925 \$70,674 \$1,122,717

2 3.16.1.1 Economic Activity

3 Arizona

- 4 Full- and part-time employment in the three-county region composed of La Paz, Mohave, and
- 5 Yuma counties increased from 110,926 to 129,492 jobs between 1995 and 2000, for a total
- 6 increase of 18,566 jobs (approximately 14 percent). Employment in all sectors of the regional
- 7 economy increased, with the exception of the farm and mining sectors, which declined by 30.6
- 8 and 32.6 percent, respectively, in La Paz and Mohave counties combined. Farm employment in
- 9 Yuma County, however, increased approximately 2.5 percent over the same time period (Table
- 10 3.16-2). The numerically greatest gains were experienced in the services; retail trade; finance,
- insurance, and real estate; and local government sectors.

12 California

- 13 Full- and part-time employment in the three-county region composed of Imperial, Riverside,
- and San Bernardino counties increased from 1,168,370 jobs in 1995 to 1,447,030 jobs in 2000, an
- increase of 278,660 jobs (approximately 19 percent). Employment in all sectors of the regional
- 16 economy increased, with the following exceptions. Agricultural services, forestry, and fishing
- declined by 24 percent in Imperial and Riverside counties (compared to a decrease of about 1
- percent in San Bernardino County), and military services declined by approximately 9 percent
- in Imperial and San Bernardino counties and by over 44 percent in Riverside County (Table
- 20 3.16-2). The numerically greatest gains were experienced in the following sectors: construction;

Table 3.16-2. Employment by Industry (number of jobs)

			Cal	lifornia					A	rizona			Nevada	
	IMPERIA	L	Riverside		San Ber	NARDINO	La I	PAZ	Моначе		Yui	MA	CLA	ARK
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Total full- time and part-time employment	58,946	61,744	514,523	662,481	595,171	722,805	6,704	7,537	44,320	54,095	59,902	67,860	617,216	866,758
By Type														
Wage and salary employment	50,884	52,581	389,971	506,024	480,506	583,766	5,383	6,099	34,936	42,483	52,996	59,656	540,495	745,041
Proprietors employment	8,062	9,163	124,282	156,457	114,665	139,039	1,321	1,438	9,384	11,612	6,906	8,204	76,721	121,717
Farm proprietors employment	685	676	3,843	3,771	1,863	1,830	150	157	239	239	636	618	201	187
Nonfarm proprietors employment	7,377	8,487	120,439	152,686	112,802	137,209	1,171	1,281	9,145	11,373	6,270	7,586	76,520	121,530
	•			•	•	By Ini	OUSTRY					•		
Farm employment	5,050	6,180	12,125	13,909	5,046	5,577	667	389	382	339	3,613	3,705	304	339
Nonfarm employment	53,896	55,564	502,128	648,572	590,125	717,228	6,037	7,148	43,938	53,756	56,289	64,155	616,912	866,419
Private employment	40,616	40,722	422,227	557,854	485,722	599,648	5,018	5,983	37,894	46,971	43,211	50,142	554,762	787,517
Agricultural services, forestry, fishing and other	10,181	7,711	19,001	21,080	7,823	7,731	346	484	464	632	9,560	11,888	5,824	9,175
Mining	(D)	(D)	1,167	893	1,228	894	41	(D)	235	145	68	(D)	1,389	1,424
Construction	2,007	2,283	37,514	63,146	33,769	45,244	262	190	4,212	4,837	2,352	3,400	52,832	75,531
Manufacturi ng	1,961	1,974	43,613	57,789	58,699	75,191	324	402	3,010	3,506	1,755	2,485	17,742	22,489

Table 3.16-2. Employment by Industry (number of jobs) (Continued)

			Cai	lifornia					A	rizona			Nevada	
	IMPERIA	L	Riverside		San Ber	San Bernardino		La Paz			Yuma		CLA	ARK
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Transportati on and public utilities	2,668	2,884	16,428	20,752	35,890	45,353	222	312	2,046	2,444	2,158	1,829	28,724	43,578
Wholesale trade	1,962	2,413	15,878	21,806	26,908	34,491	85	(D)	1,182	1,468	3,587	2,160	18,945	24,797
Retail trade	9,482	10,321	98,596	119,732	118,842	132,508	1,581	1,828	10,682	13,144	9,623	10,891	97,488	142,470
Finance, insurance, and real estate	(D)	(D)	33,601	50,668	31,680	45,941	354	397	3,532	4,374	2,662	(D)	46,433	85,685
Services	9,897	10,474	156,429	201,988	170,883	212,295	1,803	2,219	12,531	16,421	11,446	14,401	285,385	382,368
Government and government enterprises	13,280	14,842	79,901	90,718	104,403	117,580	1,019	1,165	6,44	6,785	13,078	14,013	62,150	78,902
Federal, civilian	1245	1776	6297	6,724	12,209	11,211	157	167	455	545	2,245	2,578	7,855	9,429
Military	578	523	5496	3,030	17,810	18,558	40	45	343	360	4,420	4,340	9,535	9,356
State and local	11457	12543	68108	80,964	74,384	87,811	822	953	5,246	5,880	6,413	7,095	44,760	60,117
State government	2611	2537	9886	11,704	10,182	10,971	67	64	401	(D)	425	(D)	9,707	10,940
Local government	8846	10006	58222	69,260	64,202	76,840	755	889	4,845	(D)	5,988	(D)	35,053	49,177

Notes: (D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

Source: Bureau of Economic Analysis, Regional Economic Information System, Table CA25, May 2003.

- 1 finance, insurance, and real estate; and wholesale trade. Nonfarm personal income comprises
- 2 over 95 percent of total income for all three counties. Agricultural services earnings as a
- 3 percentage of nonfarm earnings, however, are greatest in Imperial County (about 8 percent) as
- 4 compared to Riverside and San Bernardino counties where the contributions are 2 and 0.66
- 5 percent, respectively.

6 Nevada

- 7 Full- and part-time employment in Clark County increased from 617,216 jobs in 1995 to 866,758
- 8 jobs in 2000, an increase of 269,542 jobs (approximately 31 percent). Employment in all sectors
- 9 of the regional economy increased, with the exception of the military sector, which declined by
- 10 about 2 percent. The sectors that increased at the greatest rate were finance, insurance, and real
- 11 estate, which increased by over 84 percent; agricultural services, fishing, and forestry, which
- increased by 57 percent; and transportation and public utilities, which increased by 51 percent.
- 13 Farm employment in Clark County comprises less than 0.5 percent of total full-time and part-
- 14 time employment within the county; the services industry employs almost half of the
- 15 workforce. Nonfarm income comprises over 99.9 percent of the total personal income within
- 16 Clark County. Earnings from agricultural services contribute less than 1 percent of the county's
- 17 total nonfarm earnings. Of the total cash receipts from agricultural sales in Clark County, 66
- 18 percent are attributable to livestock and products, and 34 percent are attributable to crops. This
- proportion is similar to the state of Nevada as a whole. Thirty percent of total farm production expenses in the county are spent on hired farm labor, and about 15 percent are used to purchase
- feed. Fifty percent of the total production expenses fall in the "all other" production expenses
- 22 category.

23 **3.16.2** Environmental Consequences

24 Significance Criteria

- 25 The analysis of socioeconomic impacts is required by NEPA, which does not require the use of
- 26 significance criteria. This analysis addresses whether the proposed action and alternatives
- 27 would have substantial adverse effects to local employment levels and agricultural productivity
- 28 within the planning area and surrounding communities.

29 Methodology

- 30 Since specific site sizes and locations are not known, the socioeconomic analysis evaluates
- 31 impacts for selected quantities of land that could be converted from irrigated agricultural use to
- 32 conservation areas (100 acres, 500 acres, and 1,000 acres). The corresponding number of farm
- 33 workers whose labor would no longer be required is estimated, along with the reduction in the
- value of agricultural products that would not be produced. Each of these effects is compared to
- 35 (1) the existing level of employment (both total and farm) and (2) market value of all
- 36 agricultural products sold.
- 37 The potential loss of employment and value of agricultural products is estimated through the
- 38 use of two ratios developed from readily available information. The first indicates the
- 39 relationship between the change in the value of agricultural products and loss of agricultural

- land. The second addresses the change in farm employment associated with a reduction in 1
- 2 harvested cropland.
- The first ratio describes the relationship between the total number of harvested irrigated 3
- cropland acres for each county for the year 1997 (Table 3.16-1) and the market value of crops 4
- harvested in 1997 (Table 3.16-1). To estimate the loss of value of agricultural products 5
- attributable to the proposed action, the quantity of land that is converted out of irrigated 6
- 7 farmland (in acres) is multiplied by this ratio. The resulting value is an estimate of the potential
- 8 economic loss in terms of market value for each acre of cropland taken out of production.
- 9 The second ratio relates the change in farm labor to a change in the amount of cropland
- harvested. The percentage of the market value of crops that is composed of labor is determined 10
- 11 by comparing the annual expenses of hired farm labor (Table 3.16-3) to the total cash receipts
- from all agricultural products sold (Table 3.16-3). This percentage is applied to the value of 12
- crops harvested per acre, resulting in an estimate of the cost of labor per acre of land harvested. 13
- This is an expression of the cost of labor not expended for each acre taken out of production. 14
- Using an average wage rate for farm workers of \$7.25/hour, the annual labor cost per worker 15
- 16 (assuming full-time employment of 2,080 hours/year, is \$15,080/year. Dividing the cost of
- 17 labor per harvested acre by the annual cost of one farm worker results in the number of farm
- 18 workers required per acre of harvested land per year.
- 19 To estimate the potential reduction in the value of agricultural products, the value of the crops
- harvested per acre was used to determine the total value of agricultural crops per 100, 500, and 20
- 1,000 acres. These figures were then compared to the total market value for all of the 21
- 22 agricultural products sold in each county, resulting in the value of agricultural products as a
- percentage of the market value. 23
- The results of the socioeconomic analysis for both the impact to employment and to the 24
- economy in terms of market values are displayed in Table 3.16-4. 25
- 26 The potential loss of property taxes was assessed qualitatively.
- 27 3.16.2.1 Alternative 1: Proposed Conservation Plan
- *Impacts* 28
- Impact SOC-1: Agricultural jobs would be lost if agricultural land were converted to 29
- conservation areas. Table 3.16-4 presents values that represent the likely impacts (to 30
- employment) associated with the voluntary conversion of varying amounts of irrigated 31
- agricultural land. (Note that this table contains information for Clark County. No impacts 32
- would occur in this county under the proposed action since no agricultural lands are present in 33
- Reaches 1 and 2 of the LCR. Clark County information is included in this table because it is 34
- relevant to Alternative 4 since the Virgin/Muddy rivers off-site conservation area is in this 35
- 36 county.) Depending upon the county in which the conversion takes place, the reduction in farm
- employment could range from a low of 18 agricultural laborers (per 1,000 acres of converted 37
- farmland) in Mojave County, Arizona to a high of 124 workers (per 1,000 acres of converted 38
- 39 farmland) in San Bernardino County, California. The agricultural sector of the economy is most

Table 3.16-3. Farm Income and Expenses (thousands of dollars)

			Calif	ornia					Ariz	zona			Nevada	
	Імры			RSIDE	SAN BER		La		Мон		Yu		CL	
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Total cash receipts from marketings	1,030,857	894,648	1,179,532	1,078,471	613,739	614,706	65,451	101,263	12,624	13,969	840,564	780,126	18,886	20,310
Cash receipts: livestock and products	261,870	253,267	488,947	415,496	550,118	530,271	390	418	4,372	10,040	138,899	148,152	14,669	13,408
Cash receipts: crops	768,987	641,381	690,585	662,975	63,621	84,433	65,061	100,845	8,252	3,929	701,665	631,974	4,217	6,902
Other income	24,679	41,193	28,001	36,783	11,691	16,889	6,430	15,242	4,281	7,292	15,961	32,239	1,708	2,400
Govt. payments	1,032	10,006	994	7,389	652	4,899	238	5,789	224	1,279	793	8,100	(L)	66
Imputed and misc. income received	23,647	31,187	27,007	29,394	11,039	11,990	6,192	9,453	4,057	6,013	15,168	24,139	1,677	2,334
Total production expenses	708,542	788,551	929,065	1,068,665	559,313	600,209	63,924	106,561	21,803	21,160	496,218	610,886	19,324	21,175
Feed purchased	82,002	88,224	185,783	225,038	223,060	251,018	69	56	1,339	1,14	21,474	21,820	3,501	3,194
Livestock purchased	104,567	102,110	49,641	40,516	46,135	39,178	(L)	(L)	303	1,412	55,994	87,265	798	497
Seed purchased	19,805	28,646	16,670	25,324	3,607	5,803	1,465	2,526	223	259	15,482	22,732	104	133
Fertilizer and lime (incl. Ag. chem 1078-fwd.) ¹	72,514	74,492	50,599	52,936	4,099	4,008	8,411	12,382	1246	989	46,152	48,876	259	351

Table 3.16-3. Farm Income and Expenses (thousands of dollars) (Continued)

			Calif	ornia					Ariz	zona			Nevada	
	Імры		Rive		SAN BER		LA		Мон		Yu		CLA	
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Petroleum products purchased	13,246	19,771	11,519	16,770	4,808	6,388	1,693	3,326	925	1,355	9,364	15,014	261	396
Hired farm labor expenses	173,465	205,621	220,362	270,766	74,096	93,962	30,964	54578	3,947	3,526	147,200	179,919	4,525	6,460
All other production expenses	242,943	269,687	394,491	437,315	203,508	199852	21,317	33,689	13,820	12,405	200,552	235,260	9,876	10,144
Total cash receipts and other income	1,055,536	935,841	1,207,533	1,115,254	625430	631595	71,881	116,505	16,905	21,261	856,525	812,365	20,594	22,710
less: Total production expenses	708,542	788,551	929,065	1,068,665	559,313	600,209	63,924	106,561	21,803	21,160	496,218	610,886	19,324	21,175
Realized net income	346,994	147,290	278,468	46,589	66,117	31,386	7,957	9,944	-4898	101	360,307	201,479	1,270	1,535
plus: Value of inventory change	-778	874	-2,551	-1,337	-2250	1,514	2,616	2,512	480	520	1,911	1,879	78	56
Total net income including corporate farms	346,216	148,164	275,917	45,252	63,867	32,900	10,573	12,456	-4418	621	362,218	203,358	1,348	1,591
less: Net income of corporate farms	44,534	80,632	25,491	15,544	569	843	517	5,705	-1,358	(L)	52,981	130,127	364	556
plus: statistical adjustment	(L)	(L)	(L)	(L)	0	(L)	0	0	0	0	(L)	(L)	0	0

Table 3.16-3. Farm Income and Expenses (thousands of dollars) (Continued)

			Calif	ornia					Nevada					
	IMPE	ERIAL	Riverside		San Bernardino		La Paz		MOHAVE		YUMA		CLA	ARK
	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000	1995	2000
Total net farm proprietors' income	301,681	67,534	250,425	29,710	63,298	32,058	10,056	6,751	-3,060	652	309,236	73,233	984	1,035
plus: Farm wages and perquisites	72,855	91,526	134,801	165,979	62,414	74,880	15,025	7,720	3,041	2,822	61,105	78,210	2,549	5,199
plus: Farm other labor income	7,452	8,617	13,900	15,750	6,080	6,413	893	358	200	144	4,072	4,262	97	179
Total farm labor and proprietors' income	381,988	167,677	399,126	211,439	131,792	113,351	25,974	14,829	181	3,618	374,413	155,705	4,630	6,413

Notes: (1) Fertilizer and lime are expenditures on fertilizer and lime by all farms during a given calendar year. After 1977, this estimate includes expenditures on agricultural chemicals (pesticides), as well.

Source: Bureau of Economic Analysis, Regional Economic Information System, Table CA45, May 2003.

⁽L) Less than \$50,000, but the estimates for this item are included in the totals.

Table 3.16-4. Impacts, by Size of Agricultural Conversion, to Employment and the Value of Agricultural Sales

COUNTY La Paz,		Mohave, Yuma,		Riverside,	San Bernardino,	Clark, Nevadaª							
Artzona	Arizona	Artzona	Catifornia	Canforma	California	Neouuu ^u							
	Redu	ICTION IN NU	MBER OF FARM WO	ORKERS									
3.1	1.8	4.3	2.5	5.9	12.4	11.1							
15.5	9.0	21.5	12.5	29.5	62.0	55.5							
31.0	18.0	43	25.0	59.0	124.0	111.0							
REDUCTION IN NUMBER OF FARM WORKERS AS PERCENT OF TOTAL EMPLOYMENT													
0.04%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%							
0.22%	0.02%	0.03%	0.02%	0.01%	0.01%	0.01%							
0.43%	0.04%	0.07%	0.04%	0.01%	0.02%	0.02%							
REDUCTIO	n in Number	OF FARM WO	ORKERS AS PERCEN	T OF FARM EM	IPLOYMENT								
0.68%	0.51%	0.13%	0.06%	0.05%	0.26%	3.26%							
3.42%	2.53%	0.64%	0.28%	0.26%	1.29%	16.28%							
6.84%	5.06%	1.28%	0.55%	0.53%	2.58%	32.55%							
	REDUCTION	IN VALUE OF A	Agricultural Pi	RODUCTS SOLD									
\$938,810	\$1,242,370	\$2,671,550	\$1,963,240	\$4,267,840	\$15,624,330	\$5,556,660							
CTION IN VAI	LUE OF AGRIC	ultural Prc	DUCTS SOLD AS PI	ERCENT OF TO	ΓAL MARKET VA	LUE							
0.99%	8.29%	0.51%	0.23%	0.41%	2.53%	29.36%							
	3.1 15.5 31.0 REDUCTION 0.04% 0.22% 0.43% REDUCTION 0.68% 3.42% 6.84%	Arizona REDU 3.1 1.8 15.5 9.0 31.0 18.0 REDUCTION IN NUMBER 0.04% 0.00% 0.22% 0.02% 0.43% 0.04% REDUCTION IN NUMBER 0.68% 0.51% 3.42% 2.53% 6.84% 5.06% REDUCTION IN SUMBER \$938,810 \$1,242,370	Arizona Arizona Arizona REDUCTION IN NU 3.1 1.8 4.3 15.5 9.0 21.5 31.0 18.0 43 REDUCTION IN NUMBER OF FARM WO 0.04% 0.00% 0.01% 0.22% 0.02% 0.03% 0.43% 0.04% 0.07% REDUCTION IN NUMBER OF FARM WO 0.68% 0.51% 0.13% 3.42% 2.53% 0.64% 6.84% 5.06% 1.28% REDUCTION IN VALUE OF AGRICULTURAL PRO \$938,810 \$1,242,370 \$2,671,550 CTION IN VALUE OF AGRICULTURAL PRO	Arizona Arizona California REDUCTION IN NUMBER OF FARM WO 3.1 1.8 4.3 2.5 15.5 9.0 21.5 12.5 31.0 18.0 43 25.0 REDUCTION IN NUMBER OF FARM WORKERS AS PERCEN 0.04% 0.00% 0.01% 0.00% 0.22% 0.02% 0.03% 0.02% 0.43% 0.04% 0.07% 0.04% REDUCTION IN NUMBER OF FARM WORKERS AS PERCEN 0.68% 0.51% 0.13% 0.06% 3.42% 2.53% 0.64% 0.28% 6.84% 5.06% 1.28% 0.55% REDUCTION IN VALUE OF AGRICULTURAL PRODUCTS SOLD AS PRODUCTS SOLD A	Arizona Arizona California California REDUCTION IN NUMBER OF FARM WORKERS 3.1 1.8 4.3 2.5 5.9 15.5 9.0 21.5 12.5 29.5 31.0 18.0 43 25.0 59.0 REDUCTION IN NUMBER OF FARM WORKERS AS PERCENT OF TOTAL EN 0.04% 0.00% 0.01% 0.00% 0.00% 0.22% 0.02% 0.03% 0.02% 0.01% 0.43% 0.04% 0.07% 0.04% 0.01% REDUCTION IN NUMBER OF FARM WORKERS AS PERCENT OF FARM EM 0.68% 0.51% 0.13% 0.06% 0.05% 3.42% 2.53% 0.64% 0.28% 0.26% 6.84% 5.06% 1.28% 0.55% 0.53% REDUCTION IN VALUE OF AGRICULTURAL PRODUCTS SOLD \$4,267,840 \$2,671,550 \$1,963,240 \$4,267,840	Reduction in Number of Farm Workers September of Sarm Workers							

Notes: a Impacts to Clark County would not occur under the proposed action. Information is included in this table because it is relevant to Alternative 4.

important in La Paz, Mojave, Yuma, and Imperial counties, where the average value is just under 30 workers per 1,000 acres of converted farmland. It is estimated that, on average, there would be a reduction of just under 30 workers for every 1,000 acres of farmland that is taken out of irrigated agricultural use. Losses of this magnitude represent extremely small shares (less than 1 percent) of total employment in the respective counties. The average reduction in farm employment in the representative counties would be 3.4 percent. Because this is a programmatic document, impacts to specific communities are not identifiable, but they would be considered during the site-selection process. Impacts to individual communities would be

- 1 minimized because of the need to disperse conservation areas along the LCR to meet the habitat
- 2 needs of the covered species.
- 3 Impact SOC-2: Agriculture-related revenue would be lost if agricultural land were converted
- 4 to conservation areas. Based on the conversion of 1,000 acres from agricultural use, it is
- 5 estimated that the reduction in the value of agricultural products sold would range from just
- 6 under \$940,000 to over \$15,624,000. Values for the most representative counties average about
- 7 \$1.7 million. When such potential losses are compared to existing levels of total value of all
- 8 agricultural products sold in each of the four representative counties (La Paz, Mojave, Yuma,
- 9 and Imperial) the reduction averages 2.5 percent (Table 3.16-4). Because this is a programmatic
- document, impacts to specific communities are not identifiable, but they would be considered
- during the site-selection process. Impacts to individual communities would be minimized
- because of the need to disperse conservation areas along the LCR to meet the habitat needs of
- the covered species. Individual landowners would not experience adverse economic impacts
- 15 the covered species. Individual fandowners would not experience duverse economic impacts
- since privately owned land used for LCR MSCP purposes would be acquired or leased only on
- a voluntary basis, and landowners would receive compensation.
- 16 Impact SOC-3: Local property tax revenues could be reduced if privately owned land were
- 17 leased or acquired by the Federal or state participants in the LCR MSCP. The LCR MSCP
- participants would either lease tribal land, acquire or lease private land, or use public land for
- 19 conservation area establishment and the construction of field facilities. If tribal land were
- 20 leased, no changes in property tax liability would occur, because Indian tribes do not pay local
- 21 property taxes. If private land were leased, taxes would continue to be paid by the property
- 22 owner, but they could decrease if the land were reassessed at a lower value resulting from the
- 23 change in use to a wildlife conservation area. The amount of land potentially involved would
- 24 be relatively small compared to the total amount of harvested cropland available in the region,
- 25 however, and tax revenues derived from agricultural lands are typically small compared to
- 26 revenues derived from land supporting higher levels of development such as urban and
- 27 community uses. Additionally, as noted under Impacts SOC-1 and SOC-2, conservation would
- 28 not be concentrated in one area, thus diminishing impacts to any particular area. If publicly
- 29 owned land were used, no changes in local property taxes would occur since government
- 30 entities do not pay such taxes.
- 31 Impact SOC-4: Local sales tax from the purchase of products related to agricultural uses
- would be reduced if privately owned agricultural land were placed in public ownership.
- 33 Sales tax revenues would decrease along with agricultural output if agricultural land were
- 34 converted to conservation areas with other land cover types, but this decrease would be small
- 35 when compared to total sales taxes in any of the counties and would not have an impact to the
- overall economy. Sales taxes would be reduced if the land was leased as well as purchased.
- 37 *Mitigation Measures*
- No mitigation measures are required because substantial adverse impacts would not occur.
- 39 Residual Impacts
- 40 Residual impacts are those that would occur after the implementation of mitigation measures to
- 41 reduce an impact. No mitigation measures are required; thus, no residual impacts would occur.

1 3.16.2.2 Alternative 2: No Action Alternative

- 2 Under the no action alternative, it is likely that conservation measures similar to those included
- 3 in the proposed action would be implemented since compliance with the ESA still would be
- 4 required for the covered activities, although some conservation could occur in the off-site
- 5 conservation areas (as described in section 3.16.2.4 below), as well as along the LCR. **Impacts**
- 6 SOC-1, SOC-2, SOC-3, and SOC-4 apply to this alternative. To the extent that the agencies
- 7 undertaking the covered activities proceed with ESA compliance through section 7
- 8 consultations instead of the section 10 permitting process, there may be a reduced number of
- 9 covered species because unlisted species would not be included. This would also likely result
- in a smaller amount of conservation area being established. It is estimated that the no action
- alternative would develop fewer acres of conservation area than the proposed action, which
- 12 would result in proportionately fewer socioeconomic impacts. The same types of impacts
- 13 would occur as described for the proposed action, but the overall magnitude would be lessened
- since a smaller area would be affected.
- 15 Mitigation Measures
- 16 No mitigation measures are required because substantial adverse impacts would not occur.
- 17 Residual Impacts
- 18 Residual impacts are those that would occur after the implementation of mitigation measures to
- 19 reduce an impact. No mitigation measures are required; thus, no residual impacts would occur.
- 20 3.16.2.3 Alternative 3: Listed Species Only
- 21 Impacts
- 22 **Impacts SOC-1, SOC-2, SOC-3,** and **SOC-4** apply to this alternative, although a smaller amount
- of conservation area would be developed than under the proposed action. Under a worst-case
- 24 scenario that assumes that all conservation areas would be established on agricultural land,
- 25 impacts to socioeconomic resources would be less than under the proposed action, because less
- 26 conversion of agricultural land would be required.
- 27 Mitigation Measures
- No mitigation measures are required because substantial adverse impacts would not occur.
- 29 Residual Impacts
- 30 Residual impacts are those that would occur after the implementation of mitigation measures to
- 31 reduce an impact. No mitigation measures are required; thus, no residual impacts would occur.

1 3.16.2.4 Alternative 4: Off-Site Conservation

- 2 Impacts
- 3 Impacts SOC-1, SOC-2, SOC-3, and SOC-4 apply to this alternative. Under this alternative, a
- 4 total of 7,772 acres of conservation area would be established within the off-site conservation
- 5 areas. Assuming that the conservation area would be evenly divided among the three off-site
- 6 areas, approximately 2,590 acres would be established in each. Impacts to socioeconomic
- 7 resources would affect Clark County, Nevada, and Yuma and Mohave counties in Arizona,
- 8 along with towns and cities located in and near the off-site conservation areas. Impacts would
- 9 be reduced in proportion to the amount of agricultural land converted to conservation area.
- 10 The impacts associated with the establishment of 360 acres of backwaters would be identical to
- 11 those of the proposed action for this component of the Conservation Plan since they would be
- 12 located within the planning area.
- 13 Mitigation Measures
- 14 No mitigation measures are required because substantial adverse impacts would not occur.
- 15 Residual Impacts
- 16 Residual impacts are those that would occur after the implementation of mitigation measures to
- 17 reduce an impact. No mitigation measures are required; thus, no residual impacts would occur.

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